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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,501	03/29/2000	Olli Talvitie	460-009334-US(PAR)	6906

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EXAMINER

LE, DANH C

ART UNIT	PAPER NUMBER
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2683

15

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/537,501

Applicant(s)

TALVITIE ET AL.

Examiner

DANH C LE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,5,8,9,12 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,8,9,12 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2, 5, 12, 16, 17, 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Madahiro (US 6,049,310).

As to claim 2, Madahiro teaches the system for matching an antenna for a wireless communication device (figure 1, 9 and col.7, lines 34-36 and col.11, lines 1-64), characterized in that it comprises:

detecting means to detect the matching of the antenna by measuring the distance of the wireless communication device from objects in the vicinity of the wireless communication device at the time and means to generate a matching signal on the basis of the distance measurement,

control means to examine said matching signal, to determine the need for matching, and to generate a control signal on the basis of said matching signal, and

antenna matching means to adjust the matching of the antenna on the basis of said control signal.

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As to claim 5, the claim is an apparatus of claim 2; therefore, the claim is interpreted and rejected as set forth in the claim 2.

As to claim 12, the claim is a method of claim 2; therefore, the claim is interpreted and rejected as set forth in the claim 2.

As to claim 16, Madahiro teaches the system for matching an antenna for a wireless communication device (figure 1, 9 and col.7, lines 34-36 and col.11, lines 1-64), characterized in that it comprises:

Antenna driving electronics (figure 1,11),

detecting means to detect the matching of the antenna by measuring the distance of the wireless communication device from objects in the vicinity of the wireless communication device at the time and means to generate a matching signal on the basis of the distance measurement,

control means to examine said matching signal, to determine the need for matching, and to generate a control signal on the basis of said matching signal, and

antenna matching means coupled to said driving electronics to adjust the matching of the antenna on the basis of said control signal so that as much as possible of the power of the antenna driving electronics radiators from the antenna.

As to claim 17, the claim is an apparatus of claim 16; therefore, the claim is interpreted and rejected as set forth in the claim 16.

As to claim 20, the claim is a method of claim 16; therefore, the claim is interpreted and rejected as set forth in the claim 16.

3. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madahiro in view of Terk (US 5,812,066).

As to claim 8, Madahiro fails to teach the means to measure the distance comprises an infrared transmitter and receiver. Terk teaches wireless communication device according to claim 7, characterized in that said means to measure a distance comprise an infrared transmitter (col.13, lines 21-41) and an infrared receiver (col.12, line 43-col.13, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Terk into the system of Madahiro in order to provide enhanced system performance of the portable radio apparatus having adaptive antenna matching.

As to claim 18, the limitation of the claim is the same limitation of claim 8; therefore, the claim is interpreted and rejected as set forth as claim 8.

4. Claims 9, 15, 19, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madahiro in view of Tamura (US 5,335,638).

As to claim 9, Madahiro teaches the wireless communication device according to claim 5. Madahiro fails to teach the antenna is arranged to be placed in at least two different positions, characterized in that said detecting means comprise means to examine the position of the antenna and means to generate the matching signal on the basis of the position of the antenna. Tamura teaches the antenna (20) is arranged to be placed in at least two different positions, characterized in that said detecting means comprise means to examine the position of the antenna (20) and means to generate the

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matching signal on the basis of the position of the antenna (col.3, line 14-col.4, line 40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Tamura into the system of Madahiro in order to provide enhanced system performance of the portable radio apparatus having adaptive antenna matching.

As to claim 15, Tamura further teaches the wireless communication device comprising at least a keypad cover (10) arranged to be placed in at least two different positions, characterized in that said detecting means comprise means to examine the position of the keypad cover (10) and means to generate the matching signal on the basis of the position of the keypad cover (40).

As to claim 19, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.


As to claim 21, the limitation of the claim is the same limitation of claim 15; therefore, the claim is interpreted and rejected as set forth as claim 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Danh C.Le



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